

Section 1. Registration Information

Source Identification

Facility Name:	Safeway Phoenix Ice Cream Plant
Parent Company #1 Name:	Safeway, Inc.
Parent Company #2 Name:	

Submission and Acceptance

Submission Type:	Re-submission
Subsequent RMP Submission Reason:	5-year update (40 CFR 68.190(b)(1))
Description:	5 Year Update
Receipt Date:	22-Feb-2013
Postmark Date:	22-Feb-2013
Next Due Date:	22-Feb-2018
Completeness Check Date:	22-Feb-2013
Complete RMP:	Yes
De-Registration / Closed Reason:	
De-Registration / Closed Reason Other Text:	
De-Registered / Closed Date:	
De-Registered / Closed Effective Date:	
Certification Received:	Yes

Facility Identification

EPA Facility Identifier:	1000 0018 1956
Other EPA Systems Facility ID:	

Dun and Bradstreet Numbers (DUNS)

Facility DUNS:	
Parent Company #1 DUNS:	
Parent Company #2 DUNS:	

Facility Location Address

Street 1:	2434 E. Pecan Road
Street 2:	
City:	Phoenix
State:	ARIZONA
ZIP:	85040
ZIP4:	
County:	MARICOPA

Facility Latitude and Longitude

Latitude (decimal):	33.395278
Longitude (decimal):	-112.028889
Lat/Long Method:	Address Matching - House Number
Lat/Long Description:	Administrative Building
Horizontal Accuracy Measure:	100
Horizontal Reference Datum Name:	North American Datum of 1983
Source Map Scale Number:	

Owner or Operator

Operator Name:	Safeway,Inc (Environmental Affairs)
Operator Phone:	(925) 226-5845

Mailing Address

Operator Street 1:	11555 Dublin Canyon Way
Operator Street 2:	
Operator City:	Pleasanton
Operator State:	CALIFORNIA
Operator ZIP:	94588
Operator ZIP4:	3492
Operator Foreign State or Province:	
Operator Foreign ZIP:	
Operator Foreign Country:	

Name and title of person or position responsible for Part 68 (RMP) Implementation

RMP Name of Person:	Jason Glover
RMP Title of Person or Position:	Plant Manager
RMP E-mail Address:	jason.glover@safeway.com

Emergency Contact

Emergency Contact Name:	Carol Klaahsen
Emergency Contact Title:	Plant Maintenance Manager
Emergency Contact Phone:	(602) 567-1365
Emergency Contact 24-Hour Phone:	(602) 763-4997
Emergency Contact Ext. or PIN:	
Emergency Contact E-mail Address:	carol.klaahsen@safeway.com

Other Points of Contact

Facility or Parent Company E-mail Address:	
Facility Public Contact Phone:	
Facility or Parent Company WWW Homepage Address:	www.safeway.com

Local Emergency Planning Committee

LEPC:	Maricopa County LEPC
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Full Time Equivalent Employees

Number of Full Time Employees (FTE) on Site:	80
FTE Claimed as CBI:	

Covered By

OSHA PSM :	Yes
EPCRA 302 :	Yes
CAA Title V:	
Air Operating Permit ID:	

OSHA Ranking

OSHA Star or Merit Ranking:

Last Safety Inspection

Last Safety Inspection (By an External Agency) Date:	14-Mar-2012
Last Safety Inspection Performed By an External Agency:	Zurich Insurance

Predictive Filing

Did this RMP involve predictive filing?:

Preparer Information

Preparer Name:	Safeway Inc.
Preparer Phone:	(925) 226-5845
Preparer Street 1:	11555 Dublin Canyon Way
Preparer Street 2:	
Preparer City:	Pleasanton
Preparer State:	CALIFORNIA
Preparer ZIP:	94588
Preparer ZIP4:	
Preparer Foreign State:	
Preparer Foreign Country:	
Preparer Foreign ZIP:	

Confidential Business Information (CBI)

CBI Claimed:
Substantiation Provided:
Unsanitized RMP Provided:

Reportable Accidents

Reportable Accidents:	See Section 6. Accident History below to determine if there were any accidents reported for this RMP.
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Process Chemicals

Process ID:	1000040450
Description:	ammonia refrigeration
Process Chemical ID:	1000048634
Program Level:	Program Level 3 process
Chemical Name:	Ammonia (anhydrous)
CAS Number:	7664-41-7
Quantity (lbs):	24000
CBI Claimed:	
Flammable/Toxic:	Toxic

Process NAICS

Process ID:	1000040450
Process NAICS ID:	1000040851
Program Level:	Program Level 3 process
NAICS Code:	31152
NAICS Description:	Ice Cream and Frozen Dessert Manufacturing

Section 2. Toxics: Worst Case

Toxic Worst ID: 1000033377

Percent Weight:	
Physical State:	Gas liquified by pressure
Model Used:	EPA's RMP Guidance for Ammonia Refrigeration Reference Tables or Equations
Release Duration (mins):	10
Wind Speed (m/sec):	1.5
Atmospheric Stability Class:	F
Topography:	Urban

Passive Mitigation Considered

- Dikes:
- Enclosures:
- Berms:
- Drains:
- Sumps:
- Other Type:

Section 3. Toxics: Alternative Release

Toxic Alter ID: 1000035326

Percent Weight:

Physical State:

Model Used:

Wind Speed (m/sec):

Atmospheric Stability Class:

Topography:

Gas liquified by pressure

EPA's RMP Guidance for Ammonia Refrigeration
Reference Tables or Equations

3.0

D

Urban

Passive Mitigation Considered

Dikes:

Enclosures:

Berms:

Drains:

Sumps:

Other Type:

Active Mitigation Considered

Sprinkler System:

Deluge System:

Water Curtain:

Neutralization:

Excess Flow Valve:

Flares:

Scrubbers:

Emergency Shutdown:

Other Type:

Section 4. Flammables: Worst Case

No records found.

Section 5. Flammables: Alternative Release

No records found.

Section 6. Accident History

No records found.

Section 7. Program Level 3

Description

Ammonia refrigeration for processing of milk and ice cream products and storage.

Program Level 3 Prevention Program Chemicals

Prevention Program Chemical ID:	1000041763
Chemical Name:	Ammonia (anhydrous)
Flammable/Toxic:	Toxic
CAS Number:	7664-41-7

Prevention Program Level 3 ID:	1000035339
NAICS Code:	31152

Safety Information

Safety Review Date (The date on which the safety information was last reviewed or revised):	22-Jan-2013
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Process Hazard Analysis (PHA)

PHA Completion Date (Date of last PHA or PHA update):	22-Jan-2013
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The Technique Used

What If:	
Checklist:	Yes
What If/Checklist:	
HAZOP:	Yes
Failure Mode and Effects Analysis:	
Fault Tree Analysis:	
Other Technique Used:	
PHA Change Completion Date (The expected or actual date of completion of all changes resulting from last PHA or PHA update):	31-Dec-2013

Major Hazards Identified

Toxic Release:	Yes
Fire:	Yes
Explosion:	Yes
Runaway Reaction:	
Polymerization:	
Overpressurization:	Yes
Corrosion:	Yes
Overfilling:	Yes
Contamination:	Yes
Equipment Failure:	Yes
Loss of Cooling, Heating, Electricity, Instrument Air:	
Earthquake:	
Floods (Flood Plain):	

Tornado:
Hurricanes:
Other Major Hazard Identified:

Process Controls in Use

Vents:
Relief Valves: Yes
Check Valves: Yes
Scrubbers:
Flares:
Manual Shutoffs: Yes
Automatic Shutoffs: Yes
Interlocks:
Alarms and Procedures: Yes
Keyed Bypass:
Emergency Air Supply:
Emergency Power:
Backup Pump: Yes
Grounding Equipment:
Inhibitor Addition:
Rupture Disks:
Excess Flow Device:
Quench System:
Purge System:
None:
Other Process Control in Use:

Mitigation Systems in Use

Sprinkler System: Yes
Dikes:
Fire Walls:
Blast Walls:
Deluge System:
Water Curtain:
Enclosure: Yes
Neutralization:
None:
Other Mitigation System in Use: Water diffusion tank

Monitoring/Detection Systems in Use

Process Area Detectors: Yes
Perimeter Monitors:
None:
Other Monitoring/Detection System in Use:

Changes Since Last PHA Update

Reduction in Chemical Inventory:
Increase in Chemical Inventory:
Change Process Parameters:
Installation of Process Controls:
Installation of Process Detection Systems:

Installation of Perimeter Monitoring Systems:

Installation of Mitigation Systems:

None Recommended:

None: Yes

Other Changes Since Last PHA or PHA Update:

Review of Operating Procedures

Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures): 23-Jan-2013

Training

Training Revision Date (The date of the most recent review or revision of training programs): 25-Jan-2011

The Type of Training Provided

Classroom: Yes

On the Job: Yes

Other Training:

The Type of Competency Testing Used

Written Tests:

Oral Tests: Yes

Demonstration: Yes

Observation: Yes

Other Type of Competency Testing Used:

Maintenance

Maintenance Procedures Revision Date (The date of the most recent review or revision of maintenance procedures): 25-Jan-2011

Equipment Inspection Date (The date of the most recent equipment inspection or test): 14-Dec-2012

Equipment Tested (Equipment most recently inspected or tested): Ammonia detectors

Management of Change

Change Management Date (The date of the most recent change that triggered management of change procedures): 30-Jul-2012

Change Management Revision Date (The date of the most recent review or revision of management of change procedures): 25-Jan-2011

Pre-Startup Review

Pre-Startup Review Date (The date of the most recent pre-startup review):

Compliance Audits

Compliance Audit Date (The date of the most recent compliance audit): 25-Jan-2011

Compliance Audit Change Completion Date (Expected or actual date of completion of all changes resulting from the compliance audit): 12-Aug-2011

Incident Investigation

Incident Investigation Date (The date of the most recent incident investigation (if any)):

Incident Investigation Change Date (The expected or actual date of completion of all changes resulting from the investigation):

Employee Participation Plans

Participation Plan Revision Date (The date of the most recent review or revision of employee participation plans): 25-Jan-2011

Hot Work Permit Procedures

Hot Work permit Review Date (The date of the most recent review or revision of hot work permit procedures): 31-Mar-2011

Contractor Safety Procedures

Contractor Safety Procedures Review Date (The date of the most recent review or revision of contractor safety procedures): 25-Jan-2011

Contractor Safety Performance Evaluation Date (The date of the most recent review or revision of contractor safety performance): 13-Apr-2012

Confidential Business Information

CBI Claimed:

Section 8. Program Level 2

Section 9. Emergency Response

Written Emergency Response (ER) Plan

Community Plan (Is facility included in written community emergency response plan?): Yes

Facility Plan (Does facility have its own written emergency response plan?):

Response Actions (Does ER plan include specific actions to be taken in response to accidental releases of regulated substance(s)?):

Public Information (Does ER plan include procedures for informing the public and local agencies responding to accidental release?):

Healthcare (Does facility's ER plan include information on emergency health care?):

Emergency Response Review

Review Date (Date of most recent review or update of facility's ER plan):

Emergency Response Training

Training Date (Date of most recent review or update of facility's employees):

Local Agency

Agency Name (Name of local agency with which the facility ER plan or response activities are coordinated): Phoenix Fire Department

Agency Phone Number (Phone number of local agency with which the facility ER plan or response activities are coordinated): (602) 262-4523

Subject to

OSHA Regulations at 29 CFR 1910.38: Yes

OSHA Regulations at 29 CFR 1910.120:

Clean Water Regulations at 40 CFR 112:

RCRA Regulations at CFR 264, 265, and 279.52:

OPA 90 Regulations at 40 CFR 112, 33 CFR 154, 49 CFR 194, or 30 CFR 254:

State EPCRA Rules or Laws: Yes

Other (Specify):

Executive Summary

A. ACCIDENTAL RELEASE PREVENTION AND EMERGENCY RESPONSE POLICIES

The management and staff of the Safeway Phoenix Ice Cream Plant are committed to operating their facility with the highest regard for the safety of the public, Safeway Phoenix Ice Cream Plant personnel, and the environment. To ensure the safety of the public, Safeway Phoenix Ice Cream Plant personnel, and the environment, the plant has implemented a management system that integrates the elements of OSHA's Process Safety Management (PSM) standard, 29 CFR 1910.119 and EPA's Risk Management Program (RMP) rule, 40 CFR part 68. The policies and procedures integrated under the Safeway Phoenix Ice Cream Plant's management system specifically address prevention of the release of anhydrous ammonia, and emergency response to an accidental release of ammonia.

B. STATIONARY SOURCE AND REGULATED SUBSTANCE

The Safeway Phoenix Ice Cream Plant operates refrigerated storage freezers and process equipment. Anhydrous ammonia is used as a refrigerant in the mechanical compression refrigeration system at the facility. Ammonia is handled in a closed-loop process that consists of the following general stages: liquid storage; expansion; evaporation; compression; and condensation.

The ammonia refrigeration system is the only process at the Safeway Phoenix Ice Cream Plant which is subject to the EPA RMP rule (and the OSHA PSM standard). Anhydrous ammonia is the only regulated substance handled in the ammonia refrigeration system.

The refrigeration cycle begins with the transfer of high pressure liquid ammonia from the Thermosyphon Receiver to the Controlled Pressure Receiver 2. The Thermosyphon Receiver also supplies liquid ammonia to the Ice Cream Barrel Freezer Evaporators and Storage Silos. In addition, liquid ammonia is routed to the compressors for thermosyphon oil cooling or liquid injection oil cooling. As heat is absorbed at the evaporators and process equipment, the ammonia is partially vaporized. The liquid/vapor ammonia from the Ice Cream Barrel Freezer Evaporators is drawn back to the Low Pressure Recirculator 2, while liquid/vapor from the Silos is drawn to the High Temperature Accumulator.

The Controlled Pressure Receiver sends liquid ammonia to the Palletizing/Packing Area Evaporators, Glycol Chiller and the Intercooler, where a portion of the liquid is provided for the ammonia bath, and a portion is routed through a coil to be subcooled. The partially vaporized ammonia from the evaporators and chiller is drawn back to the High Temperature Accumulator.

The Intercooler provides subcooled liquid ammonia to the Low Pressure Recirculator 1 and 2 and the Palletizing/Ante Room Evaporators, East and West Dock Evaporators. The temperature inside the Intercooler is maintained by the high side suction drawn by Compressors 1-4. The partially vaporized ammonia at the evaporators is returned to the High Temperature Accumulator.

The Low Pressure Recirculator 2 provides pumped low temperature liquid ammonia to the Penthouse and South Maintenance Warehouse Evaporators. The partially vaporized ammonia at the evaporators is returned to the same vessel. The temperature inside the Low Pressure Recirculator 2 is maintained by Booster Compressors 4-6.

The Low Pressure Recirculator 1 provides pumped liquid to the Spiral Freezers and the Poly Tray Evaporators. The partially vaporized ammonia is returned to the same vessel. Following defrost of the evaporators, the defrost return is routed to the High Temperature Accumulator. Booster Compressors 1-3 maintain the pressure inside the Low Pressure Recirculator 1.

The High Temperature Accumulator receives high temperature suction from the Glycol Chiller, Silos, Palletizing/Packing Evaporators, Spiral Freezer and Poly Tray Evaporator defrost return, Palletizing/Ante Room Evaporators, Dock Evaporators and the Heat Exchanger. High side suction is drawn from the accumulator by the Compressors 1-4. Excess liquid is transferred by the two Liquid Transfer Units to the Controlled Pressure Receiver 2.

The four compressors draw ammonia vapor from the Intercooler and High Temperature Accumulator. At the compressors, the pressure and temperature of the vapor is increased. The compressed vapor is discharged through a common header to the three evaporative condensers and to the evaporators, where the hot compressor discharge is used for defrost purposes. At the condensers, water and fans are used to remove heat from the compressor discharge, and the resulting high pressure liquid

ammonia flows back to the Thermosyphon Receiver, where the cycle begins again. Booster Compressors 1-3 draw suction from the Low Pressure Recirculator 1, while the Booster Compressors 4-7 draw suction from the Low Pressure Recirculator 2. Booster Compressor #7 is a swing compressor and is piped to draw suction from either the Low Pressure Recirculator 1 or 2. After the pressure and temperature of the vapor is increased, the Booster Compressor discharge is routed to the Intercooler where it is cooled. The relief valves on the high pressure vessels and compressors are set at 250 and 300 psig and 150 for the low pressure vessels.

C. ACCIDENTAL RELEASE PREVENTION PROGRAM AND CHEMICAL-SPECIFIC PREVENTION STEPS

The Safeway Phoenix Ice Cream Plant has many safety features, including those implemented on the ammonia refrigeration system. Much of the safety of the system is inherent in the policies and procedures that govern the operation of the system. For example, the facility operates in accordance with the OSHA's Process Safety Management (PSM), and Federal EPA's Risk Management Program (RMP), Program 3 requirements.

The ammonia refrigeration system at the Safeway Phoenix Ice Cream Plant was designed and constructed in accordance with the Uniform Mechanical Code, which specifically outlines requirements for the safe operation of the ammonia refrigeration system. These safety features include ammonia sensors throughout the plant, pressure relief valves to protect vessels' integrity, and automatic shut down systems that prevent equipment damage and ammonia releases. In the event of ammonia detection, audible and visual alarms are triggered throughout the facility.

Ammonia refrigeration systems do not experience any chemical reactions or internal corrosion. The only composition change that occurs within the systems are phase changes, as ammonia is cycled through various stages of liquid and vapor, similar to a household refrigerator. The refrigeration system is a closed-loop system without any regular emissions or releases. Any leaks are noted and repaired immediately.

In addition to the Uniform Mechanical Code, the facility will operate in accordance with the International Institute of Ammonia Refrigeration (IIAR) guidelines. In particular, the IIAR Bulletin 110, "Startup, Inspection, and Maintenance of Ammonia Refrigeration Systems."

D. FIVE YEAR ACCIDENT HISTORY

Over the past five years (February 2008 - February 2013), the Phoenix Ice Cream Plant has not had any reportable ammonia releases that resulted in deaths, injuries, property damage, environmental damage, or offsite evacuations.

E. EMERGENCY RESPONSE PROGRAM

The Safeway Phoenix Ice Cream Plant has an emergency action plan in effect. The Emergency Action Plan (Plan) is detailed in the Emergency Planning and Response section of the PSM/RMP document, which is maintained at the facility. Emergency response activities are coordinated with the Phoenix Fire Department and the local fire houses. If necessary, the facility will call 9-1-1 to alert the local Police and Fire Departments.

Other responders will be called as needed, including the Phoenix Fire Department. If a release exceeds the federal reporting quantity of 100 pounds for ammonia, the National Response Center will be called.

The Safeway Phoenix Ice Cream Plant will be responsible for evacuating and ensuring the safety of its employees in case of an emergency evacuation. Evacuation drills are performed at least annually. Other training received by employees includes: ammonia awareness, what to do in case of emergency, and where to go when an evacuation is called.

The following summarizes the notification procedures at the facility:

1. First call 911 on an internal/land line phone for the Phoenix Fire Department, Police Departments, and California Highway Patrol. The Phoenix Fire Department can be reached directly at 602-262-4523.
2. Call the LEPC Maricopa County at 602-273-1411 in the event of an uncontrolled release, especially, if release exceeds 100 lbs.

in 24 hour period.

3. If additional help is required for an ammonia spill or leak, the facilities can call Chemtrec - Manufacturing Chemists Association 1-800-424-9300.

4. If an ammonia release exceeds 100 pounds (Federal Reportable Quantity CERCLA), call the National Response Center 1-800-424-8802.

5. If release enters a waterway or if ammonia is released directly into the storm drain, call Arizona Dept. of Environmental Quality 602-771-2330 (24 hour) 800-234-5677 (toll free in AZ).

6. If serious injuries or harmful exposures to workers occurs, call OSHA , Region 9 at 800-321-OSHA

7. If ammonia is released into the sewer system, contact Phoenix Public Works Department at 602-262-7251.

8. If an employee ingests ammonia, the Poison Control Center can be reached 24 hours per day at 800-342-9293.

F. PLANNED CHANGES TO IMPROVE SAFETY

The Process Hazard Analysis Revalidation was conducted on January 22, 2013. The analysis include a Hazard and Operability (HAZOP) study and provided mitigation measures to improve safety at the Safeway Phoenix Ice Cream Plant located at 2434 E. Pecan Road in Phoenix, AZ. All recommendations from the PHA Revalidation will be addressed by December 31, 2013. Ongoing ammonia safety training will be conducted.